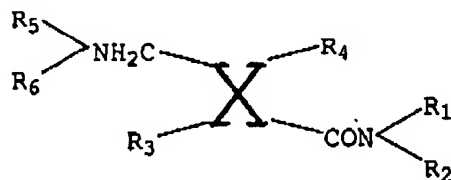


COMPLETE LISTING OF CLAIMS

1 (CURRENTLY AMENDED) A compound of the formula:



wherein:

R_1 , R_2 and R_3 are independently selected from the group consisting of H and C_1 - C_2 alkyl;

R_3 and R_4 are selected from C_2 - C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid convention) of $R_7-(CH_2)_n-HC(NH_2)-CO-$;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is selected from the group consisting of furanyl, pyrrolyl, thiophenyl, pyridinyl, indolyl, benzo-furanyl, benzo-thiophenyl, quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, primidinyl, purinyl, and pteridinyl; and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected in each instance from the group consisting of trans, trans $>C=CH--HC=C<$, trans $>C=C<$, and $>C^*H--(CH_2)_m--HC^*<$, where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

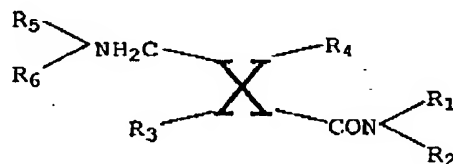
$m = 0, 1$ or 2 ,

or a pharmaceutically acceptable salt, solvate or prodrug thereof.

- 3 ² ~~2~~ (CURRENTLY AMENDED) The compound of claim ~~33~~² 4 wherein R₁, R₂ and R₅ are hydrogen.
- 4 ² ~~3~~ (CURRENTLY AMENDED) The compound of claim ~~33~~² 4 wherein R₁ is methyl and R₂ and R₅ are hydrogen.
- 5 ² ~~4~~ (CURRENTLY AMENDED) The compound of claim ~~33~~² 4 wherein R₁ and R₂ are methyl and R₅ is hydrogen.
- 6 ² ~~5~~ (CURRENTLY AMENDED) The compound of claim ~~33~~² 4 wherein R₁ and R₂ are hydrogen and R₅ is methyl.
- 7 ² ~~6~~ (CURRENTLY AMENDED) The compound of claim ~~33~~² 4 wherein R₁, R₂ and R₅ are methyl.

- 7 (CANCELED)
- 8 (CANCELED)
- 9 (CANCELED)
- 10 (CANCELED)
- 11 (CANCELED)
- 12 (CANCELED)
- 13 (CANCELED)
- 14 (CANCELED)
- 15 (CANCELED)
- 16 (CANCELED)
- 17 (CANCELED)
- 18 (CANCELED)
- 19 (CANCELED)
- 20 (CANCELED)
- 21 (CANCELED)

- 22 (CANCELED)
- 9 23 (CURRENTLY AMENDED) The compound of claim ~~34~~⁸ 22 wherein R₁, R₂ and R₅ are hydrogen.
- 10 24 (CURRENTLY AMENDED) The compound of claim ~~34~~⁸ 22 wherein R₁ is methyl and R₂ and R₅ are hydrogen.
- 11 25 (CURRENTLY AMENDED) The compound of claim ~~34~~⁸ 22 wherein R₁ and R₂ are methyl and R₅ is hydrogen.
- 12 26 (CURRENTLY AMENDED) The compound of claim ~~34~~⁸ 22 wherein R₁ and R₂ are hydrogen and R₅ is methyl.
- 13 27 (CURRENTLY AMENDED) The compound of claim ~~34~~⁸ 22 wherein R₁, R₂ and R₅ are methyl.
- 14 28 (CURRENTLY AMENDED) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of the formula



wherein:

R₁, R₂ and R₅ are independently selected from the group consisting of H and C₁–C₂ alkyl;

R₃ and R₄ are selected from C₂–C₈ alkyl;

R₆ is selected from H and the L-isomer (amino acid convention) of R₇–(CH₂)_n–HC(NH₂)–CO–;

wherein

n is an integer from 0 to 3;

R₇ is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said is selected from the group consisting of furanyl, pyrrolyl, thiophenyl, pyridinyl, indolyl, benzofuranyl, benzothiophenyl, quinolinyl,

~~isquinolinyl, imidazolyl, thiazolyl, pyrazinyl, pyrimidinyl, purinyl, and pteridinyl, and~~
said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

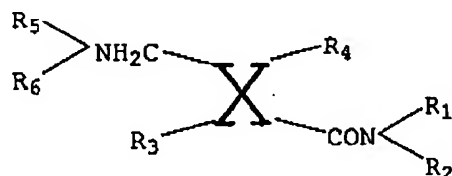
X is independently selected in each instance from the group consisting of trans,
trans $>C=CH-HC=C<$, trans $>C=C<$, and $>C^*H-(CH_2)_m-HC^*<$ where "*" indicates a chiral center and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

$m = 0, 1$ or 2 , or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

15
29

(CURRENTLY AMENDED) A method of treating a mammal affected with the
magnesium-binding defect, comprising administering to the mammal a pharmaceutically
effective amount of a compound of the formula



wherein:

R_1 , R_2 and R_3 are independently selected from the group consisting of H and C_1 -
 C_2 alkyl;

R_3 and R_4 are selected from C_2 - C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid
convention) of $R_7-(CH_2)_n-HC(NH_2)-CO-$;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and
monosubstituted heteroaryl, wherein said heteroaryl is selected from the group consisting
of furanyl, pyrrolyl, thiophenyl, pyridinyl, indolyl, benzofuranyl, benzothiophenyl,

quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, pyrimidinyl, purinyl, and pteridinyl, and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

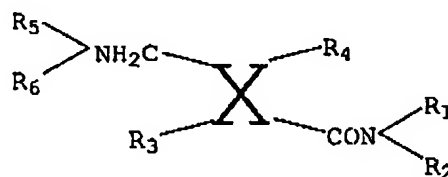
X is independently selected from the group consisting of trans, trans $>C=CH-$ $HC=C<$, trans $>C=C<$, and $>C^*H-(CH_2)_m-HC^*<$ where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

$m = 0, 1$ or 2 , or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

16
30

(CURRENTLY AMENDED) A method of treating a mammal with salt-sensitive, essential hypertension, comprising administering to the mammal a pharmaceutically effective amount of a compound of the formula:



wherein:

R_1 , R_2 and R_5 are independently selected from the group consisting of H and C_1 - C_2 alkyl;

R_3 and R_4 are selected C_2 - C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid convention) of $R_7-(CH_2)_n-HC(NH_2)-CO-$;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is selected from the group consisting of furanyl, pyrrolyl, thiophenyl, pyridinyl, indolyl, benzofuranyl, benzothiophenyl,

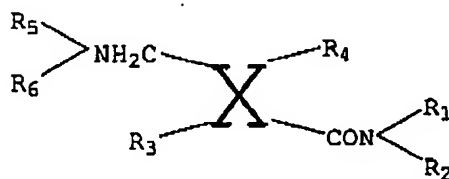
quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, pyrimidinyl, purinyl, and pteridinyl, and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected from the group consisting to trans, trans $>C=CH-$ $HC=C<$, trans $>C=C<$, and $>C^*H-(CH_2)_m-HC^*<$ where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

$m = 0, 1$ or 2 , or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

17
31 (CURRENTLY AMENDED) A method of treating a mammal with insulin resistance of Type 2 diabetes mellitus, comprising administering to the mammal a pharmaceutically effective amount of a compound of the formula:



wherein:

R_1 , R_2 and R_5 are independently selected from the group consisting of H and C_1- C_2 alkyl;

R_3 and R_4 are selected from C_2-C_8 alkyl;

R_6 is selected from the group consisting of H and the L- isomer (amino acid convention) of $R_7--(CH_2)_n--HC(NH_2)--CO-$;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is selected from the group consisting of furanyl, pyrrolyl, thiophenyl, pyridinyl, indolyl, benzofuranyl, benzothiophenyl,

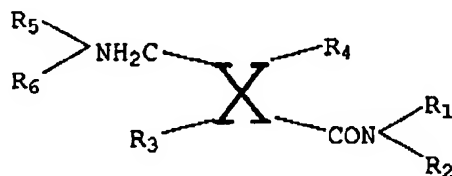
quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, ~~primidinyl, purinyl, and pteridinyl~~, and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected from the group consisting of trans, trans $>C=CH-$ $HC=C<$, trans $>C=C<$, and $>C^*H-(CH_2)_m-HC^*<$ where "*" is a chiral carbon atom and R_3 and R_4 are oriented L- and D- (amino acid convention) at these respective chiral centers; and

$m = 0, 1$ or 2 , or

a pharmaceutically acceptable salt, solvate or prodrug thereof.

18/32 (CURRENTLY AMENDED) A method of treating a mammal affected with pre-eclampsia/eclampsia, comprising administering to the mammal a pharmaceutically effective amount of a compound of the formula:



wherein:

R_1 , R_2 and R_5 are independently selected from the group consisting of H and C_1-C_2 alkyl;

R_3 and R_4 are selected from C_2-C_8 alkyl;

R_6 is selected from the group consisting of H and the L-isomer (amino acid convention) of $R_7-(CH_2)_n-HC(NH_2)-CO-$;

wherein

n is an integer from 0 to 3;

R_7 is selected from the group consisting of unsubstituted heteroaryl and monosubstituted heteroaryl, wherein said heteroaryl is selected from the group consisting of furanyl, pyrrolyl, thiophenyl, pyridinyl, indolyl, benzofuranyl, benzothiophenyl,

quinolinyl, isoquinolinyl, imidazolyl, thiazolyl, pyrazinyl, pyrimidinyl, purinyl, and pteridinyl; and said substituent is hydroxy, halo, amino, nitro, methyl or acetoxy;

X is independently selected in each instance from the group consisting of trans, trans $>C=CH-HC=C<$, trans $>C=C<$, and $>C^*H-(CH_2)_m-HC^*<$ where "*" indicates a chiral carbon atom and R_3 and R_4 are oriented L- and D-(amino acid convention) at these respective chiral centers; and

$m = 0, 1$ or 2 , or

2 a pharmaceutically acceptable salt, solvate or prodrug thereof.

33. (NEW) The compound of claim 1 wherein X is either trans, trans $>C=CH-HC=C<$ or trans $>C=C<$.

8 34. (NEW) The compound of claim 1 wherein X is either $>C^*H-(CH_2)_2-HC^*<$ or $>C^*H-HC^*<$.